



**UNITED STATES DEPARTMENT OF COMMERCE**  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/805,188 03/14/01 MORIOKA

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020457 MMC2/0815  
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EXAMINER

NGUYEN, T

ART UNIT

PAPER NUMBER

2877

DATE MAILED:

08/15/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/805,188

Applicant(s)  
Morioka et al.

Examiner  
Tu T. Nguyen

Art Unit  
2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 08/535,577.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 20) ☐ Other:



UNITED STATES DEPARTMENT OF COMMERCE  
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Paper No. 3

Serial Number: 09/805,188  
Filing Date: 03/14/01

Detailed Office Action

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuji et al (5,861,952).

Tsuji discloses an apparatus for inspecting a semiconductor comprising: processing a substrate (fig 1,17) in the first processing apparatus (fig 9, 922) without removal of the substrate from the fabrication line, detecting the foreign particle (fig 9,923), transfer the substrate to a second processing apparatus (fig 9, 921).

With respect to claims 1,9-10, Tsuji discloses the claimed invention except for determining the particle generation condition and the amount of the defects. Because Tsuji's apparatus inspects

for defected particles and corrects the defected particles by using the cleaning device so the claimed generating the particle condition would have been inherent. The skill artisan would have been motivated to modify Tsuji's system to determine the amount of the defects so that it can calculate the time needed to clean. The modification would save time and cost. Tsuji system uses a signal processing system to detect the defects so the claimed memory would have been inherent.

With respect to claims 2-3,5, Tsuji's detecting system uses a scanning method (abstract) so the claimed predetermined area and processing time would have been inherent.

With respect to claims 4,6, all the claimed limitations have been discussed in claim 1 except for the controller. Tsuji discloses a controller (fig 9, 924) for controlling the operation of the fab according to the defects.

With respect to claim 7, the claimed memory would have been inherent.

With respect to claim 8, all the claimed limitations have been discussed in claim 1 except for performing in a real time. Inspecting or detecting a substrate in a real time is well known in the art. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify Tsuji's system with a real time system to detect the substrate instantly which save time and cost.

With respect to claim 11, Tsuji's system repeatedly detects the defects, cleans them up until the substrate free from defects so the claimed determining the abnormal would have been inherent.

Papers related to this application may be submitted to TC 2877 by facsimile transmission. Papers should be faxed to TC 2877 via the PTO Fax Center located in CP4-

4C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Center number is (703)308-7722.

If the Applicant wishes to send a Fax dealing with either a Proposed Amendment or for discussion for a phone interview then the fax should:

a) Contain either the statement "DRAFT" or "PROPOSED AMENDMENT" on the Fax Cover Sheet; and

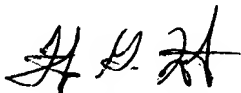
b) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Tuan Nguyen whose telephone number is (703) 306-9185.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

**Tu Tuan Nguyen**  
**Patent Examiner**  
**TC 2877**  
**August 11, 2001/TTN**

  
**Frank G. Font**  
**Supervisory Primary Examiner**  
**Group Art Unit 2877**